

What is claimed is:

1. A thermal print head platen comprising a pair of support members separated by a gap, wherein said support members are adapted to be oriented to press print media against a thermal print head for printing purposes with said gap approximately aligned with a heating element located within said print head.

2. The thermal platen as defined in claim 1, wherein said print head includes a convex surface relative to said support members for printing purposes and said heating element is located approximately at an apex of said convex surface relative to said support members for printing purposes.

3. The thermal platen as defined in Claim 1, wherein said support members and said gap are elongated and adapted for substantially parallel alignment with a thermal print head having a linear array of heating elements for printing purposes.

4. The thermal platen as defined in Claim 3, wherein said thermal print head includes an elongated convex surface in parallel relation to said linear array of heating elements, with said linear array of heating elements located approximately at an apex of said elongated convex surface.

5. The thermal platen as defined in Claim 3, wherein said platen is adapted to provide an overall convex path for print media relative to the thermal print head for printing purposes.

6. The thermal platen as defined in Claim 5, wherein said platen has an elongated overall convex surface including a convex cross sectional shape adapted for providing said overall convex print media path.

7. The thermal platen as defined in Claim 6, wherein said support members extend from said overall cross sectional surface of said platen.

8. The thermal platen as defined in Claim 6, further comprising a frame adapted for mounting said platen and allowing movement of said platen towards and away from a print head for printing purposes, while limiting movement of said platen in an orthogonal direction directly between said support members and across said gap.

9. The thermal platen as defined in Claim 8, wherein said frame comprises at least one pair of limiting members located on opposing sides of said platen and adapted to contact a portion of said convex surface of said platen, and a mechanical bias mechanism adapted to bias said platen to cause said convex surface to contact said limiting members.

10. The thermal platen as defined in Claim 9, wherein said limiting members are adapted to allow

movement of said platen directly towards said platen and against said bias mechanism.

11. The thermal platen as defined in Claim 10, wherein said limiting members are adapted to contact opposing sides of said platen and limit movement of said platen in opposing directions directly between said support members and across said gap.

12. The thermal platen as defined in Claim 3, further comprising a frame adapted for mounting said platen and allowing movement of said platen towards and away from a print head for printing purposes, while limiting movement of said platen in an orthogonal direction directly between said support members and across said gap.

13. The thermal platen as defined in Claim 1, further comprising a member arranged over or in said gap and adapted to conform a print media with a thermal print head having a linear array of heating elements for printing purposes.

14. The thermal platen as defined in Claim 13, wherein said member comprises a layer of a material arranged over said gap.

15. The thermal platen as defined in Claim 14, wherein said member comprises a layer of material having fibrous or other elements extending from a substrate, said member arranged such that said elements contact print media traveling across said platen.

16. The thermal platen as defined in Claim 13, wherein said print head includes a convex surface relative to said support members for printing purposes and said heating element is located approximately at an apex of said convex surface relative to said support members for printing purposes.

17. A thermal printer comprising a thermal print head arranged in operative relationship with a thermal print head platen as defined in Claim 1, said thermal print head platen adapted to pressure print media against said thermal print head for printing purposes.

18. The thermal printer as defined in Claim 17, wherein said print head includes a convex surface relative to said support members for printing purposes and said heating element is located approximately at an apex of said convex surface relative to said support members for printing purposes.

19. The thermal printer as defined in Claim 17, wherein said support members and said gap are elongated and adapted for substantially parallel alignment with a thermal print head having a linear array of heating elements for printing purposes.

20. The thermal printer as defined in Claim 19, wherein said thermal print head includes an elongated convex surface in parallel relation to said linear array of heating elements, with said linear array of heating

elements located approximately along an apex of said elongated convex surface.

21. The thermal printer as defined in Claim 19, wherein said platen is adapted to provide an overall convex path for print media relative to the thermal print head for printing purposes.

22. The thermal printer as defined in Claim 21, wherein said platen has an elongated overall convex surface including a convex cross sectional shape adapted for providing said overall convex print media path.

23. The thermal printer as defined in Claim 22, wherein said support members extend from said overall cross sectional surface of said platen.

24. The thermal printer as defined in Claim 22, further comprising a frame adapted for mounting said platen and allowing movement of said platen towards and away from a print head for printing purposes, while limiting movement of said platen in an orthogonal direction directly between said support members and across said gap.

25. The thermal printer as defined in Claim 24, wherein said frame comprises at least one pair of limiting members located on opposing sides of said platen and adapted to contact a portion of said convex surface of said platen, and a mechanical bias mechanism adapted to bias said platen to cause said convex surface to contact said limiting members.

26. The thermal printer as defined in Claim 25, wherein said limiting members are adapted to allow movement of said platen directly towards said platen and against said bias mechanism.

27. The thermal printer as defined in Claim 26, wherein said limiting members are adapted to contact opposing sides of said platen and limit movement of said platen in opposing directions directly between said support members and across said gap.

28. The thermal printer as defined in Claim 19, further comprising a frame adapted for mounting said platen and allowing movement of said platen towards and away from a print head for printing purposes, while limiting movement of said platen in an orthogonal direction directly between said support members and across said gap.

29. The thermal printer as defined in Claim 17, further comprising a member arranged over or in said gap and adapted to conform a print media with a thermal print head having a linear array of heating elements for printing purposes.

30. The thermal printer as defined in Claim 29, wherein said member comprises a layer of a material arranged over said gap.

31. The thermal printer as defined in Claim 14, wherein said member comprises a layer of material having

fibrous or other elements extending from a substrate, said member arranged such that said elements contact print media traveling across said platen.

32. The thermal printer as defined in Claim 31, wherein said print head includes a convex surface relative to said support members for printing purposes and said heating element is located approximately at an apex of said convex surface relative to said support members for printing purposes.

33. The thermal printer as defined in Claim 17 wherein said thermal print head is stationary and said thermal print head platen is biased against said thermal print head.

34. The thermal printer as defined in Claim 17 wherein said thermal print head platen is stationary and said thermal print head is biased against said thermal print head platen.